

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,447	10/17/2003	Cory O. Nykoluk	26/1145US(0.1)	1563
75	90 09/03/2004		EXAM	INER
Clyde L. Smith	h AFERKAMP, L.C.		MAI, T	TRI M
Suite 1400	, , , , ,		ART UNIT	PAPER NUMBER
7733 Forsyth Be			3727	
St. Louis, MO	63105		DATE MAILED: 09/03/2004	1

Please find below and/or attached an Office communication concerning this application or proceeding.

PECEIVED SEP 2 0 2004

TECHNOLOGY CENTER R3700

		Application	n No.	Applicant(s)
		10/688,447	7	NYKOLUK ET AL.
.*	Office Action Summary	Examiner		Art Unit
/		Tri M. Mai		3727
Period for				
THE - External control	ORTENED STATUTORY PERIOD FOR RE MAILING DATE OF THIS COMMUNICATIOnsions of time may be available under the provisions of 37 CFF SIX (6) MONTHS from the mailing date of this communication period for reply specified above is less than thirty (30) days, a period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by streply received by the Office later than three months after the med patent term adjustment. See 37 CFR 1.704(b).	N. R 1.136(a). In no ever . I reply within the statul riod will apply and will ature cause the appli	nt, however, may a reply be tin tory minimum of thirty (30) day expire SIX (6) MONTHS from eation to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).
Status				
1)	Responsive to communication(s) filed on _			
2a)□		This action is no		tion on to the merite is
3)[	Since this application is in condition for allo	wance except f	for formal matters, pro	osecution as to the ments is
	closed in accordance with the practice und	er Ex parte Qua	ayie, 1935 C.D. 11, 4:	00 <b>().9</b> , 210.
Disposit	ion of Claims			
4)⊠	Claim(s) 1-29 is/are pending in the applica			
	4a) Of the above claim(s) is/are with	drawn from cor	nsideration.	
,	Claim(s) is/are allowed.			
	Claim(s) <u>1-29</u> is/are rejected.			
	Claim(s) is/are objected to. Claim(s) are subject to restriction are	nd/or election re	equirement.	
	Claim(s) are subject to rectification as		•	
Applicat	ion Papers			
9)□	The specification is objected to by the Exar	miner.	معامرها معالم المعامرة المعامرة المعامرة المعامرة	Evaminer
10)	The drawing(s) filed on is/are: a)	accepted or b)	∟ objected to by the	ее 37 CFR 1.85(a).
	Applicant may not request that any objection to Replacement drawing sheet(s) including the co	orrection is requir	ed if the drawing(s) is of	bjected to. See 37 CFR 1.121(d).
11)	The oath or declaration is objected to by the	e Examiner. No	ote the attached Office	e Action or form PTO-152.
1 -	under 35 U.S.C. § 119			-) (d) os (f)
ţ.	Acknowledgment is made of a claim for for     All   b   Some * c   None of:   Certified copies of the priority docur   Certified copies of the priority docur   Copies of the certified copies of the application from the International Bu	ments have bee ments have bee priority documo	en received. en received in Applica ents have been receiv	tion No
*	See the attached detailed Office action for a			/ed.
	200 110 21120100 2012112 21100 21111011			
Attachme				(DTO 442)
1) Not	ice of References Cited (PTO-892) ice of Draftsperson's Patent Drawing Review (PTO-94)	8)	4) Interview Summar Paper No(s)/Mail f	Date
3) 🛛 Info	rmation Disclosure Statement(s) (PTO-1449 or PTO/Sper No) //Mail Date <u>12/29/03</u> .	B/08)	5) Notice of Informal 6) Other:	Patent Application (PTO-152)
rap				

Applicant(s)

Art Unit: 3727

3

#### **DETAILED ACTION**

#### **Drawings**

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the release mechanism and the locking mechanism in claim 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### **Double Patenting**

2. Claims 1-29 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-14 of U.S. Patent No. 6,651,791. Although the

Application/Control Number: 10/688,447

Art Unit: 3727

conflicting claims are not identical, they are not patentably distinct from each other because It would have been obvious to one of ordinary skill in the art to provide the claims in the present application as taught by claims 1-14 of U.S. Patent No. 6,651,791.

Page 3

## Claim Rejections - 35 USC § 112

3. Claims 10 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what is release mechanism and the locking mechanism in claim 10.

Regarding claim 21, "the arm portion ... abut the pivot axis" is confusing. "axis" refers to an imaginary line only.

#### Claim Rejections - 35 USC § 102/103

4. Claims 1-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Williams et al (4538709). Williams teaches a towing member having an arm portion, a towing handle, a pivot mechanism 50a having a center bore passing through as claimed.

Regarding claim 10, note the mechanisms 52 and going through the pivot mechanism.

Regarding claim 15, the ends of portions 50 and 50b are flat as shown in Fig. 10.

Regarding claim 26, the pivot pin 50a is entirely inside the arm portion and the towing handle in the position in Fig. 10.

5. Claims 1-4, 6, 7, 11-14, 17-24, and 26-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Liang (5464080). Liang teaches a handle with an arm portion, a towing hande and a pivot mechanism in Fig. 2. Liang teaches a handle with an arm portion, a towing hande and a pivot mechanism in Fig. 2.

Application/Control Number: 10/688,447

Page 4

Art Unit: 3727

- 6. Claims 1-12, 14-16, 18-23, and 26-29 are rejected under 35 U.S.C. 102(a) as being anticipated by Chen (6434790). Chen teaches a handle with an arm portion, a towing hande and a pivot mechanism in Fig. 3. Bloom teaches a handle with an arm portion, a towing hande and a pivot mechanism in Fig. 2.
- 7. Claims 13, 17, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chen in view of Dinnendahl (3496795). Chen meets all claimed limitations except for the pin having a bore. Dinnendahl teaches that it is known in the art provide a hinge pin with a bore. It would have been obvious for one of ordinary skill in the art to provide a pin with a bore to save material.
- 8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri M. Mai whose telephone number is (703)308-1038. The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lee W Young can be reached on (703)308-2572. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tri M. Mai

	<b>∕</b> 6	<b>IPE</b>			31.16 30 to 10 2 2 2	ATTY DOCKET NO. 26/1145US (0.1	)	Si	ERIAL	iO. /	/ <i>0/68</i> 8/9 TBA	47
		INFO	DRAMATION DISCLOSURE			Nykoluk, et al.	_					
	ŒĈ	2 9 2				FILING 10/17/03		G	ROUP	,	ТВА	-
- Co	کي_	7 97	45	U.S	S. PATENT	DOCUMENTS	,			<u>rocke sy</u> wedi.		
'EXA!	MINER AL	HOEN	DOCUMENT NUMBER	OATE		NAME	CLA	5S	SUBC	LASS	FILING DATE	
	M	A	387,198	12/09/97	Lehman	nn, et al.		ļ-	1			
	1_	В	395,361	06/23/98	Zoints,	et al.				<del></del>		
		С	1,616,632	02/08/27	Mastro	ntonio						
		D	2,722,137	11/01/55	Russell							
		E	3,401,951	09/17/68	Bloom							
		F	3,496,795	02/24/70	Dinnend	lahl						
		G	3,606,372	09/17/68	Brownin	ng						
		Н	3,799,568	03/26/74	Hager							
		1	4,368,835	01/18/83	Murphy							
	/	J	4,538,709	09/03/85	William	s						
T	M.	к	4,616,379	10/14/86	Lio					T		
				FORE	IGN PATE	NT DOCUMENTS						
1			DOCUMENT NUMBER	DATE		COUNTRY	CLAS	SS	SUBC	LASS	TRANSL YES	ATION NO
1.	W.	L	090221299	12/05/01	Taiwan			ſ				
		м	WO 98/07344	02/26/98	PCT							
		N	WO 01/52687	07/26/01	PCT							
7.	NX.	o	WO 03/053186	07/03/03	PCT							
			OTHER DOCUME	NTS (Includin	g Author,	, Title, Date, Pertinent F	ages,	Etc.)				
											<del></del>	
EXAN	AINEF	R	T-Maj			DATE CONSIDERED	01/04	<b>-</b>				
			al if reference considered, whethe de copy of this form with next com			ance with MPEP 609; Draw li	ne throu	gh cita	ation if n	ot in co	onformance	and not

/	6	IPE	<b>4</b>			ATTY DOCKET NO. 26/1145US (0.	.1)	SI	ERIAL NO	). <i>/</i>	/0/6 <i>8</i> 8/4 TBA	47
	ulth.		ORMATION DISCLOSURE	: CITATION sary)		Nykoluk, et al.						
ATT.	UC	600				FILING 10/17/03	1000 mm	GI	ROUP		ТВА	
V	E ZR	2 9 2	A. C.	U.f	S. PATENT	T DOCUMENTS						
INITIAL	L		DOCUMENT NUMBER	DATE		NAME	CLF	ASS	SUBCLAS	ss	FILING DATE	
	M	Р	4,621,404	11/1986	Browing	g						W
		Q	4,838,396	06/13/89	Krenzel							
		R	5,002,304	03/26/91	Carriga	ın, Jr.						
		s	5,048,649	09/17/91	Carpen	ter, et al.						
		т	5,197,579	03/30/93	Bieber,	et al.						
		บ	5,207,440	05/04/93	Liang							
1		v	5,323,887	06/28/94	Scicluna	a, et al.						
$\prod$		w	5,328,122	07/12/94	Yamagu	ıchí						
		х	5,330,037	07/19/94	Wang				_			
		Υ	5,339,934	08/23/94	Liang							
TA	1	z	5,353,900	10/11/94	Stilley			+		1		
_				FORE	IGN PATE	NT DOCUMENTS				_		
			DOCUMENT NUMBER	DATE		COUNTRY	CLAS	ss	SUBCLAS	ss	TRANSL YES	LATION NO
						•						
							+			$\overline{}$		
							<del> </del>					
	$\int$											
						10						
_			OTHER DOCUMEN	NTS (Includin	ig Author	, Title, Date, Pertinent i	Pages,	Etc.)			<u> </u>	
										_		
											·	
XAMI	NER		TMaj			DATE CONSIDERED	9/01	104	+			
EXAMI	INEF	t: Initia	al if reference considered, whether	r or not citation is	in conforma	ance with MPEP 609; Draw	line throu	igh cita	ition if not	in cc	onformance	and not

Form PTO-A820 (also form PTO-1449)

P09C/REV03

ATTY DOCKET NO. SERIAL NO. 26/1145US (0.1) INFORMATION DISCLOSURE CITATION DE 2 9 7005 Here and sheets if necessary) Nykoluk, et al. FILING GROUP 10/17/03 **TBA U.S. PATENT DOCUMENTS 'EXAMINER** FILING DATE DOCUMENT NUMBER DATE NAME CLASS SUBCLASS INITIAL IF APPROPRIATE 5,429,317 07/04/95 Yamaguchi 5,431,428 ВВ 07/111/95 Marchwiak, et al. 5,464,080 11/07/95 lcc Liang loo 5,464,081 11/07/95 Zwanzig EE 5,469,945 11/28/95 **Jserng** FF 5,491,872 02/20/96 Tserng GG 5,497,865 03/12/96 Yun-Pi нн 5,547,053 08/20/96 Liang 5,564,538 10/15/96 Sadow lu 04/01/97 5,615,757 Chen ΚK 5,630,521 05/20/97 Waddell, et al. **FOREIGN PATENT DOCUMENTS** TRANSLATION DATE DOCUMENT NUMBER SUBCLASS COUNTRY CLASS YES NO OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) **EXAMINER DATE CONSIDERED** EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO-A820 (also form PTO-1449) Copyright 1994-97 LegalStar

P09C/REV03

/	6	IPE	\			ATTY DOCKET NO. 26/1145US (	0.1)	SERIAL NO.	10/688,447 TBA	Branch Branch
			ORTON DISCLOSURE	CITATION		Nykoluk, et al.	·	<u> </u>		
	DEC	2 9 21	<b>19</b> 20	30177		FILING 10/17/03		GROUP	ГВА	1
To the second	? 、		<u> </u>	U.S	PATENT	DOCUMENTS			IBA	200
'EXAM	IINER	2 9 2	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING DATE	
INITIA	40	LL	5,647,095	07/15/97	Takimo	nto			IF APPROPRIATE	-
1	(.	MM	5,689,854	11/25/97	Wang			++-	<u> </u>	_
		NN	5,690,196	11/25/97	Wang					200
		00	5,706,921	01/13/98	Wang					-
		PP	5,713,441	02/03/98	Chen					
		QQ	5,722,118	03/03/98	Hansen,	et al.				
		RR	5,749,503	05/12/98	Wulf, et	al.				
		SS	5,752,415	05/19/98	Tsai					
		TT	5,769,194	06/23/98	Chang					
		υυ	5,813,504	09/29/98	Iny, et a	l.		$\perp \! \! / \! \! \perp$		
7.1	$\mu_{\mu}$	vv	5,855,408	01/05/99	Rickabu	ıs	ſ	/		
				FORE	IGN PATE	NT DOCUMENTS				
			DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO	4
										1
	<del>-</del>									
		1	OTHER DOCUMI	ENTS (Includin	ng Author	, Title, Date, Pertiner	nt Pages, Et	c.)		
EXAM	IINE	R .	TMi			DATE CONSIDERED	3-/04/0	4		1
			al if reference considered, wheth de copy of this form with next co						onformance and not	

Form PTO-A820 (also form PTO-1449) Copyright 1994 LegalStar

P09C/REV03

	01	PE	\			ATTY DOCKET NO. 26/1145US (0	0.1)	SE	ERIAL	10.	10/688, TBA	-447
/	•	INFC	DRMATION DISCLOSURE	. CITATION sary)		Nykoluk, et al.						
PA	DEC	2 9 200	n i	,		FILING 10/17/03		GI	ROUP		ТВА	
B	\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	- 48	#S	U.S	S. PATENT	DOCUMENTS						
.EX	AMINER TIAL	2 9 200	DOCUMENT NUMBER	DATE		NAME	CLAS	is	SUBC	LASS	FILING DATE	
	M,	ww	5,865,281	02/02/99	Wang		1			<u> </u>	If FW LING.	WATE
	1	xx	5,884,362	03/23/99	Tsai							
		YY	5,890,570	04/06/99	Sadow							
		ZZ	5,893,495	04/13/99	Godsha	w, et al						
		AAA	5,901,822	05/11/99	Tu							
		ввв	5,908,093	06/01/99	Miyoshi							
		ссс	5,934,425	08/10/99	Sadow							
		DDD	5,943,936	08/31/99	Deliman	ı, et al.						
		EEE	5,984,154	11/16/99	Scicluna	à						
		FFF	5,996,177	12/07/99	Cheng							
1	W.	GGG	6,009,598	01/04/00	Chang					T		
				FORE	IGN PATE	NT DOCUMENTS						
			DOCUMENT NUMBER	DATE		COUNTRY	CLAS	is	SUBC	CLASS	TRANSL YES	LATION NO
		<del></del> -	OTHER DOCUME	NTS (Includin	ig Author	, Title, Date, Pertinent	Pages, l	Etc.)				
	-	$\coprod$										
EXA	MINE	R	T. Mari			DATE CONSIDERED	D9/01	10	4			
			al if reference considered, whethe de copy of this form with next com						,	ot in co	onformance	and not

Form PTO-A820 (also form PTO-1449) P09C/REV03

/		IPE				Docket Number (Optional) 26/1145US (	0.1)	Application Number	10/68 TBA	8,447
	_ !	INFO	TION DISCLOSURE	CITATION		Applicant(s) Nykoluk, et al.				
	Œ	292		<i>"</i>		Filing Date 10/17/03	, <u>, , , , , , , , , , , , , , , , , , </u>	Group Art Unit	ГВА	
		A 6	635		U.S. PAT	ENT DOCUMENTS	as		-	
EXAMINE INITIAL	ER	REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	FILING IF APPRO	
70		ннн	6,032,771	03/07/00	Pedrini		١	P		
}		ш	6,041,900	03/28/00	Sadow,	et al.				
		111	6,059,301	05/09/00	Skarnul	is				
		ккк	6,179,101	01/30/01	Lin					
		LLL	6,179,176	01/30/01	Saggese	, et al.				
		ммм	6,193,033	02/27/01	Bogert					
		NNN	6,237,734	05/29/01	Chen				-	
		000	6,279,706	08/28/01	Mao					
		PPP	6,298,964	10/09/01	Sadow					
		QQQ	6,301,746	10/16/01	Myers,	et al.				
T.M.		RRR	6,317,924	11/20/01	Gallage	r			,	
					FOREIG	N PATENT DOCUMENTS	<b>3</b>			
,,		REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	Transi	atien NO
كالمرازدة الشرخطين والم	1									
	1					73				
	1		And the second s			<del> </del>				
	1									
					OTHER I	DOCUMENTS (Includin	ig Author, Title	, Date, Pertinent Pa	ges, Eic.)	
								7771		:
					-					
EXAMIN	NEI	R	T. Mai			DATE CONSIDERED	19-01-014	-		
			al if citation considered, whether o				9 -01-04; Draw line thr		in conform	ance and
not consi	der	red. In	clude copy of this form with next c	communication to	applicant.					

6	PE				Docket Number (Optional) 26/1145IS (	0.1)	Application Numi	TBA	18,447
	INFO	RMATION DISCLOSURI			Applicant(s) Nykoluk, et al			***************************************	
BR DEC	2 9 2	m M			Filing Date 10/17/200	13	Group Art Unit	TBA	
- Sales			er som en er	U.S. PAT	ENT DOCUMENTS			IWA	
• EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE		NAME	CLASS	SUBCLASS	į	DATE
7.14	sss	6,332,242	12/25/01	Chen			L.	JF APPRO	PRIATE
1	777	6,434,790	08/20/02	Chen					
	บบบ	6,464,245	10/15/02	Miles					
_	vvv	6,508,344	01/2003	Lu					
	www	6,530,459	03/2003	Lu	······································				
	xxx	2003/0085089	05/08/03	Lin, et a	ıl.				
	YYY	2003/0079950	05/01/03	Lin, et a	ıl.				
	222	2002/0050429	05/02/02	Nykolul	κ, et al.				
	AAAA	2003/0000785	01/02/03	Miller,	et al.				
	вввв	2003/0132079	07/17/03	Bellini					
T.M.	сссс	D463,124 S	09/24/02	Godsha	w, et al.				
		<del></del>		FOREIG	N PATENT DOCUMENT	S			
	REF	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	Trans YES	dation NO
					€1.				
			200	OTHER I	DOCUMENTS (Includi	ng Author, Title	, Date, Pertinent	Pages, Etc.)	-
EXAMINI	ER .	Tillai			date considered 09-	01-04			
		al if citation considered, whether					ough citation if	ot in conform	ance and

#### Applicant(s)/Patent Under Reexamination 10/688,447 NYKOLUK ET AL. Notice of References Cited Art Unit Examiner Page 1 of 1 3727 Tri M. Mai

Application/Control No.

**U.S. PATENT DOCUMENTS** 

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	Α	US-6,651,791	11-2003	Nykoluk et al.	190/18A
	В	US-			
	С	US-			
	ם	US-			
	E	US-			
	F	US-			
	G	US-			
	Ι	US-			
	_	US-			
	J	US-			
	К	US-			
	L	US-			
	М	US-			

#### **FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N	GB2337986	08-1999	United Kingdom	Lowenstein	A45C 13/26
	0					
	Р					
	Q					
	R					
	s					
	T					

#### NON-PATENT DOCUMENTS

	ION-I ATEM BOOMENTO								
*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)							
	U								
	٧								
	w								
	х								

A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

# UK Patent Application (19) GB (11) 2 337 986 (13) A

(43) Date of A Publication 08.12.1999

- (21) Application No 9921900.8
- (22) Date of Filing 16.10.1996

Date Lodged 17.09.1999

- (30) Priority Data (31) 9603965
- (32) 24.02.1998
  - (33) GB
- (62) Divided from Application No 9621606.4 under Section 15(4) of the Patents Act 1977
- (71) Applicant(s)

Moveasy International Limited (Incorporated in the British Virgin Islands) PO Box 71, Craigmuir Chambers, Roadtown, Tortola, British Virgin Islands

(72) Inventor(s) Frank Lowenstein (51) INT CL6

A45C 13/26 5/14

(52) UK CL (Edition Q) B8P PH2 PW **A4G** G5F1 G5T1

(56) Documents Cited

US 5482147 A US 5452778 A US 5374073 A US 5295565 A US 5291976 A

US 4618035 A

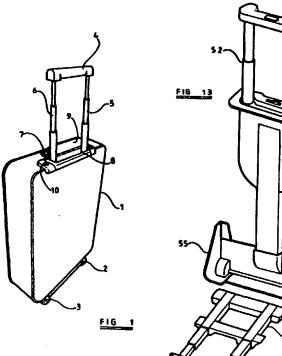
Field of Search

UK CL (Edition Q ) A4G , B8P PH2 PW INT CL<sup>6</sup> A45C 5/00 5/14 13/22 13/26 13/28 , B62B 1/12

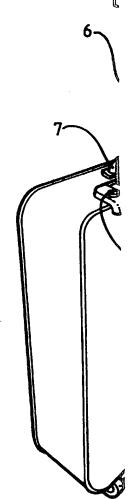
ONLINE:WPI\_EDOC,JAPIO

(74) Agent and/or Address for Service A R Davies & Co 27 Imperial Square, CHELTENHAM, Gloucestershire, GL50 1RQ, United Kingdom

- (54) Abstract Title Wheeled luggage
- (57) A luggage trolley comprises an item of luggage (1) with wheels (2,3) at the lower end which permit it to be towed when tilted by a telescopable handle (4) at the upper end. A generally rigid housing (8) is secured to the luggage for containing or including the handle and at least one telescopable member (5,6) which is thereby substantially protected from mechanical damage by the housing. Alternatively, particularly for non-rigid luggage, the handle (50) may be borne by a housing (49) connected by a support member (53) to a strut (54)



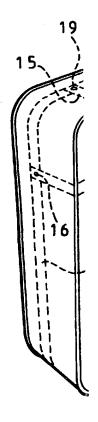
2 337 986

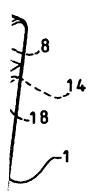


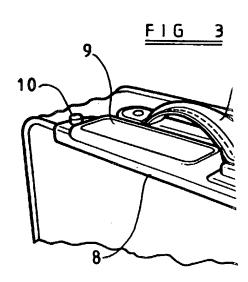
5 .8

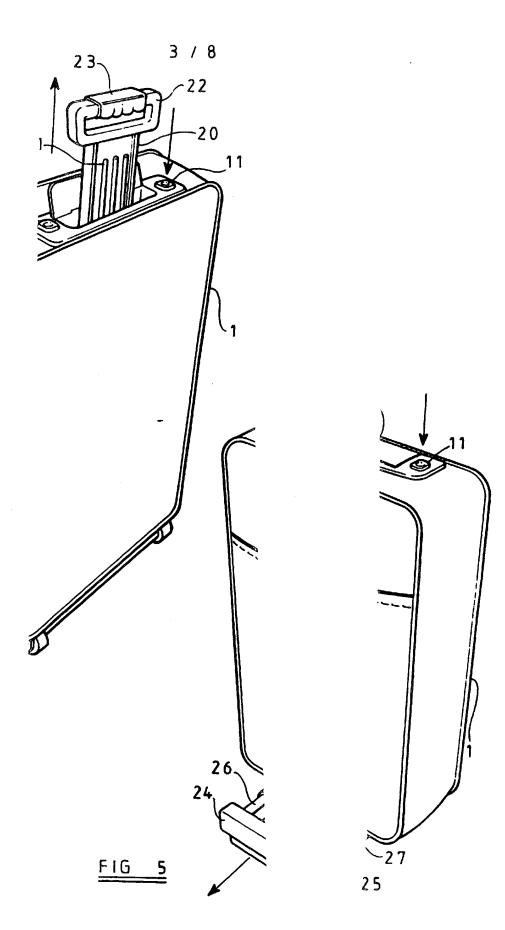
IG 1

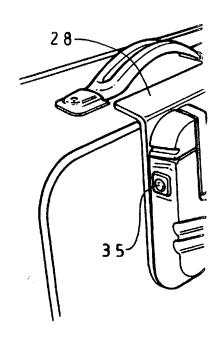
F1G 2















29

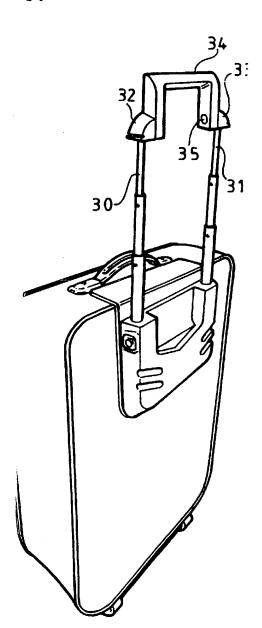
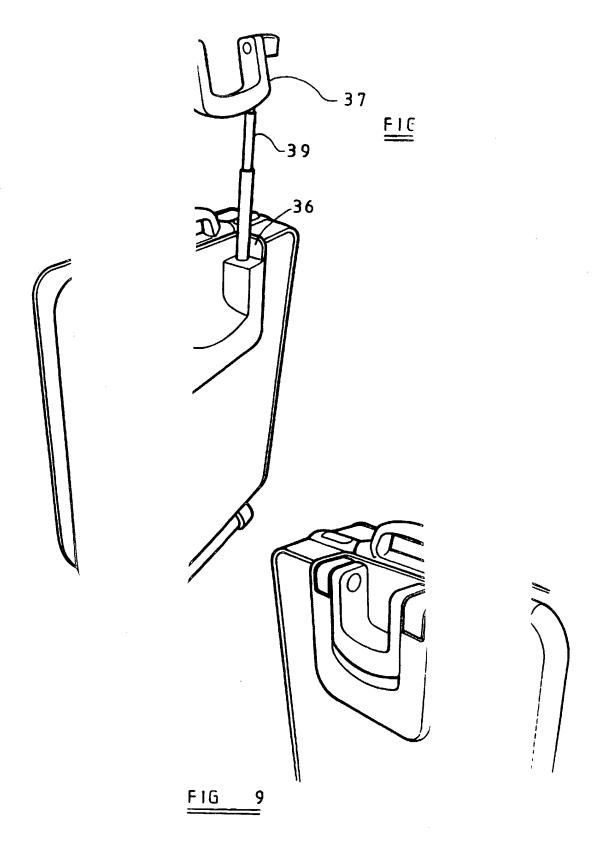
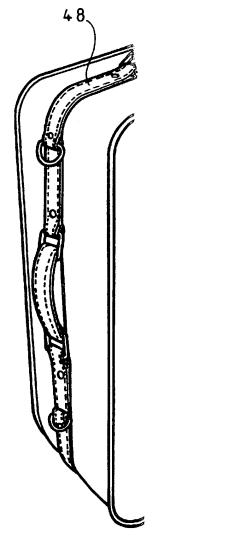


FIG 7





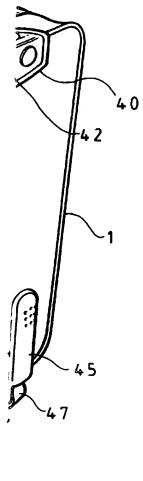
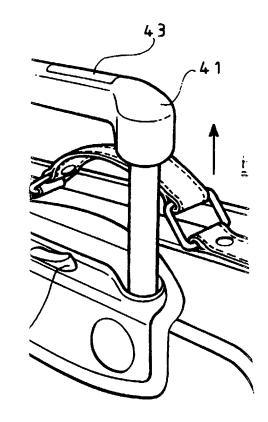
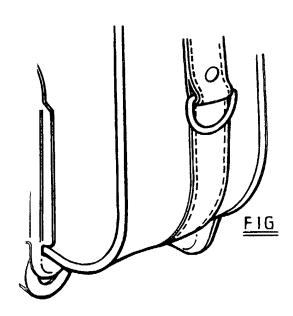
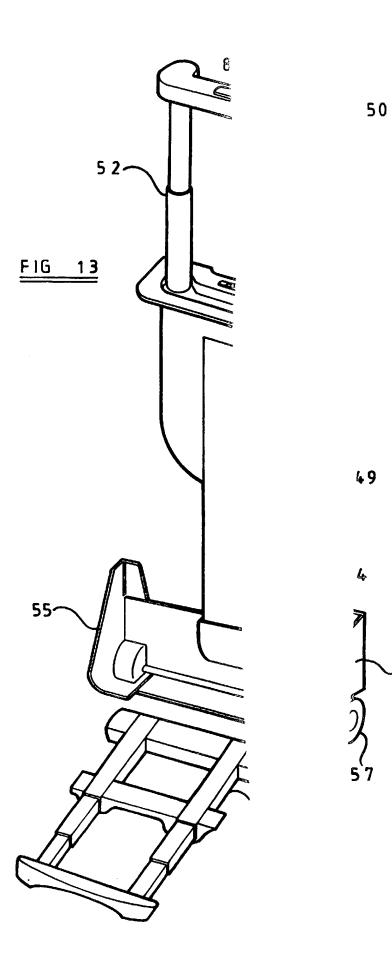


FIG 1







-56

## **IMPROVEM**

This invention

luggage, such

luggage, and a

aid of a collap.

# NG TO A COLLAPSIBLE TROLL

luggage trolleys of the type which in corporates a conventional handle fo. h the luggage may alternatively be to

arrangement.

Collapsible lug

typically made

prevent or inhib

soft-sided variet

other end of whi

stored inside or c

means of a conve

compartment of a

tubular frame is it

handle and the wi

externally. If the

handle from its stc

easily tow the lugg

erial designed to withstand shock an ents of the item of luggage. If the luminormally attached to a rigid tubular may be telescoped outwards for use one luggage so that it can be carried by ored away, for example, in the baggage certain known kinds of hard-sided luggage so the luggage so the luggage so pper and lower ands of the luggage are to be towed it is a simple matter to remained by use of the wheels.

vantage of such known kinds of col.

of the handle to be telescoped outwa

they all rely upon the ed inwardly for

e light weight is essential the telescont e are usually made of aluminium or a the luggage is of the soft-side type and gage, they are prone to damage such the illy into its usable position, or if the contact ed, difficulty arises in restoring the ha naterial. Especially
s are on the outside of
difficult to telescope
hilst it has been so
ion.

rith hard-sided luggage this problem is ing or unloading items from the inside members.

d because carelessness result in damage to the

her disadvantage of such known types of a members are somewhat unsightly and wise be used for storing items inside the the luggage takes in a storage compartment oplane if the tubular members are on the

e trolleys is that the
mal space which may
using the amount of total
ggage compartment of

an object of the present invention to obviate advantages.

e foregoing

According to
luggage, whe
permit the lug
one telescopa
wheel means,
housing adapte
the at least one
position inside
member is subs
handle may be a

ne side and at one end of the luggage

it tilted, and a collapsible handle sect
ed at or near the end of the luggage
is trolley comprises or includes a geal
luggage for containing or including
the handle being movable between
using, in which position the or each to
the housing, and an extended position
em of luggage via the wheel means.

Preferably, the lid which is spring member and the visible when the permanently experiment with recess it does not protruct housing also include move it from its sto.

and plastics material and includes an operation so that when the or each testored positions within the housing, they alternative embodiment, the handle manuface of the housing which may preferate the handle to be stored in a contiguous must gitself. Preferably, with such an arrange essess to permit the user of the handle to gainst working position. Conveniently, the handle

inge means so that it may be hinger along the or each telescopable men sing and then pulled

e housing is to be used with hard-sic side thereof, or alternatively affixed priately shaped aperture permitting to to be moved from stored to open pos veniently be affixed the luggage adjacent ch telescopable

ie item of luggage is of the soft-sided to a rigid support member secured to a ling and the to provide rigidity. It will by protects the or each telescopable mapport member will not affect the operation.

preferably be
f the luggage between
ecause the housing
ge caused to such a

rention will now be described, by way o.

nanying drawings in which:

1 reference to the

Figure 1 is an upper perspective view fittrolley in a first embodiment

ac side of a luggage

Figu

:w corresponding to that of Figure

gener

andle means and how it is attached

the it.

Figure.

of the upper end of the luggage trol

in whi

collapsed inwardly,

**Figure** 

at of Figure 1 but showing a second

of the i

Figure 5

ing to that of Figure 4 but in which the

shown is

Figure 6

iment of the invention,

Figure 7 i

of the luggage trolley of Figure 6 show

bandle me

and fully extended position,

Figure 8 is.

fourth embodiment of the invention,

Figure 9 is a pa

w of the luggage trolley of Figure 8 showing the

collapsible hanc.

ared position relative to the housing,

ure 10 shows a perspective view o

the invention,

ure 11 is a part perspective detail v

ousing means of

ure 10,

ture 12 is a part perspective detail sh

3 of the luggage of

ure 10, and

sure 13 is a part cut-out perspective  $\tau$ 

ment of the

ention.

w to Figures 1 - 3, a first embodiment

hown in which the

: luggage trolley comprises a generally

oft-sided (i.e. non-

age (1) having at its lower end a pair o

, (3) and at its upper

apsible handle (4) secured to a pair of a

rs (5), (6) each in the

see concentric tubes having cooperable

1) by which the

(5), (6) are limited as to the extert of the

it in the manner as

the drawings.

entional handle (7) is secured to the upper surface.

em of luggage (1) so

may be carried rather than rolled by the wheels (2), (3

oreferred.

The collapsible is generally rigid hinged to the side normally remain

embers (5), (6) are each receivable.

b) which includes an openable upparent to the handle (7) and spring-brown in Figure 3.

The tubular memit shown in Figures upper surface of ti and tubular memb that the lid (9) is a opposite upper surface upper surfa

sed by means of a locking button (1 ion of which permits the collapsible ed downwardly into the housing (8) position as shown in Figure 3. Similar button (11), depression expects to the item of luggage (1) to assu

from rocking relative of spring steel bands () item of luggage (1), respectively.

means of rivets (16), (17), (18).

item of luggage (1). This is achieved with

15) which are secured to the inner surface of the housing (8) and with respect to each other.

Only some of the steel bands and rivets are shown

for clarity but corresponding fea

trolley to that shown in section.

the opposite side

re be understood that the structure

the rigid plastics housing (8) is sui

1 tubular members (5), (6) to be pre

of the item of luggage (1). Since, who

ted by means of the rigid plastics ho

of the item of luggage (1), such as t

pility of the luggage trolley to operate

ls (12),(13),

permit the

ative to the

ar members (5),

aused through

), will not affect

d of it.

to Figures 4 and 5 there is shown an a

to 3 in which in this instance the item

andle means corresponding to that show

able member (20) is provided in which

attened concentric tubes, on the major sur

as (21) which improve the strength of the to

ent the collapsible handle (22) is in the shape

s which incorporates in the central portion there

at of that shown

(1) has

out in which only

ments are

tich are

per (20). In this

ontally disposed

space for the

incorporates on the

fing fone hand of the user of the luggage to be inserted.

upper portion thereof a rubber grip (23) having indentations corresponding to those of a

hand. Apart from these differences the collapsible handle means operates in the same

way as that shown

handle (22) and tele

assume the position shown in Fig.

button (11) permitt

of the reverse sequence whereby

(22) and telescopab

me a position inside the housing a

(9) assume its close

igure 5.

In Figure 5 there is al sement of the second embodiment convention in which a short bottom rail (24) is secured to teles members (25), (26) es circular concentric tubes and for accentrate there is a central large.

In Figure 5 there is al sement of the second embodiment convention in which a short bottom rail (24) is secured to teles members (25), (26) es circular concentric tubes and for accentrate there is a central large.

In Figure 5 there is al sement of the second embodiment convention in which a short bottom rail (24) is secured to teles members (25), (26) es circular concentric tubes and for accentral large.

Between the button (11)

is a cable (not shown) which provides
the bottom rail (23) may

its stored to the open position shown is

Figure 5 when button (11)

Turning now to Figures 6 ar a further alternative embodiment of the invention in which in this instant.

apsible handle means is secured to the outside of the item of soft-sided luggage of the item of soft-sided luggage (1) in similar manner to that shown in Figure 2. In this embodiment the plastic housing (29) has a generally U-shaped appearance with each arm of the "U" being used to store telescopable members (30), (31), shown in Figure 7. At

ids of each of the tubular membe n each of which is swivellably se ige pins (35) (only one of which i ecciving the handle (34) in a store may be easily locked in place by le is provided to allow the handle (3 sown in Figure 7 once the telescopal

e hinge joints (32), e (34) by means of 29) includes a igure 6, in which hown). A release and assume the , are fully extended.

nw to Figures 8 and 9 there is shown ion specifically adapted for hard-side ared from rigid plastics. In this embos a housing (36) generally similar to the correspondingly shaped aperture in the (1). A swivellable handle (37) is again p nembers of (38), (39) and arranged such e 9 the handle (37) assumes a contiguous p (36). On the inside of the luggage (1) the  $\gamma$ is a smooth plastics cover which protects the tubia e which may otherwise occur when loading or unload the items from the luggage

ve embodiment of generally e handle means 6 and 7 but secured alf of the item of pective ends of tored position shown to the rest of the ing (36) not shown bers (38), (39) from

Because, in this embodiment, the item of luggage (1) is made of a hard-sided plastics material its inherent rigidity is sufficient to obviate the need to secure the housing (36) to other reinforcing means such as steel bands etc. This is particularly advantageou. 5 therefore essentially independe

and the rest o : it is in modular form, damage u

the luggage (1 bility.

In Figures 10: adiment of the invention is shown

suitcase (1) is stics housing (40), again incorpor

handle means (4" sed into its open position as shown

when not in us: position shown in Figure 10 by me

releasable catcl witch (42) which, when pressed, at

releases the han wn in figure (11). On the upper surf:

closed position it to press the button (43) and push dow

(41) into its closed locked in place.

A further feature of m in Figures 10 - 12 is a pair of clongate

plastics wheel housing the lower end of the suitcase which provide the

functions, the first best sprotection for respective wheels (46), (47). The

second function serves to pre . . . e side of the suitcase (1) shown from damage when :

is being rolled up or down stairs unce the wheel housings (44), (45) are sufficiently long

enough to ensure that when the suitcase (1) is tilted they protect it from shock or

abrasion by contact with the leading edges of the stairs.

r feature of the embodiment shown in the rivers to the outer side panels of which the suitcase (1) may be carried articles may be attached.

continuous strap
ating handles and
urations or to

larity the suitcase is not shown. In the larity the larity and larity the larity and larity support and rigid structure of the suitcase. The late a correspondingly shaped aperture ut (54) on each end of which are respective wheels (57), only one of whether that the structure defined by the elemental two-wheeled trolley even though it is in the wise conventional item of luggage. A bottom is the underside of the item of luggage and may be carried as required thereon.

ention but in
ective plastics

52) includes at the
le rigidity to the
d support member
aped transverse
housings (55), (56)
ill be seen in this
espond to a
structure defined by
so provided which is
ped outwardly so that

The invention in its several embodiments thus provides an elegant and simple solution to problems associated with damage to collapsible tubular members which are necessary in order to make it easy for the user to tow items of luggage via wheels. In particular, the use of a modular housing which may be fixed inside or outside the item of luggage

provides tha

ed to fit luggage of all shapes and

consequent ;

unufacturing costs, whilst at the sa

permitting the

ous component parts and facilitativ

in the event 7.

A luggage trolley adapted to 'ally "L"-shaped strut on each end a rigid support member secured to mal axis thereof, and a generally rigid from the strut containing or including, the handle being moveable between, in which position the or each telescopulating, and an extended position in which luggage via the wheel means.

20

wheel housings and transversely to the the support member ast one telescopable le or adjacent to the antially protected by used for towing the

A luggage trolley comprising an wheel means disposed e side and at one end of the luggage and adap e luggage to be towed in tilted, and a collapsible handle secured to a lescopable member and elisposed at or near the end of the luggage remove om the wheel means, tharacterised in that the trolley comprises or more a generally rigid housing adapted to be secured to the luggage for containing or including the handle and the at least one telescopable member, the handle being moveable between a stored position inside or adjacent to the housing, in which position the or each telescopable member is substantially protected by the housing, and an extended position in which the handle may be used for towing the item of luggage via the wheel means.

3. A luggage trolley according to Claim 1 or Claim 2 further characterised in

that the able upper lid which is spring bia positions lescopable member and the handle appositions re not visible when the lid is closed

5 4. cording to Claim 2 or Claim 3 furtiin that the . h the outer surface of the housing.

5. according to Claim 4 in which the harmonic recesses to part and move it from its sto.

10 its working

6. according to any preceding claim in which includes hinge and upwards along the member.

15

- A huggange tree by according to any preceding claim in which the housing is connected to the wheel means by a rigid support member to provide rigidity for the item of huggage.
- 20 8. A luggage trolley according to Claim 1 in which the support member comprises a substantially rigid plastics tube.
  - 9. A luggage trolley substantially as hereinbefore described with reference to and as shown in the accompanying drawings.



1 No:

GB 9921900.8

rched:

1 to 9

Mike Henderson 28 September 1999

# ct 1977 eport under Section 17

#### searched:

Office collections, including GB, L

pecifications, in:

1 (Ed.Q): B8P (PH2 PW) A4G

1 (Ed.6): A45C 5/00 5/14 13/22

2

)NLINE:WPI,EDOC,JAPIO

#### s considered to be relevant:

	entity of docur	ment and relevant passs:		Relevant to claims
	S 5482147	(WANG) (See par	•)	1,2,4, 5 & 7
	JS 5452778	(WANG) (See partic	3 & 8)	1,2 & 7
	US 5374073	(HUNG-HSIN) (See Parts	3s 1 to 3)	1,2 & 7
	US 5295565	(LATSHAW) (See partic)	カ	1,2 & 7
X	US 5291976	(KU) (See particularly Figs 1 &	k 0)	1,2 & 7
Ж	US 4618035	(MAO) (See particularly Figs 1	1,2 & 10)	1,2 & 7

Document indicating lack of novelty or inventive step Document indicating lack of inventive step if combined with

one or more other documents of same category.

A Document indicating technological background and/or state of the art.
P Document published on or offer the dark Document published on or after the declared priority date but before the filing date of this invention.

Patent document published on or after, but with priority date earlier than, Member of the same patent family the filing date of this application.

An Executive Agency of the Department of Trade and Industry

# USPTO TO PROVIDE ELECTRONIC ACCESS TO CITED U.S. PATENT REFERENCES WITH OFFICE ACTIONS AND CEASE SUPPLYING PAPER COPIES

In support of its 21st Century Strategic Plan goal of increased patent e-Government, beginning in June 2004, the United States Patent and Trademark Office (Office or USPTO) will begin the phasein of its E-Patent Reference program and hence will: (1) provide downloading capability of the U.S. patents and U.S. patent application publications cited in Office actions via the E-Patent Reference feature of the Office's Patent Application Information Retrieval (PAIR) system; and (2) cease mailing paper copies of U.S. patents and U.S. patent application publications with Office actions (in applications and during reexamination proceedings) except for citations made during the international stage of an international application under the Patent Cooperation Treaty (PCT). In order to use the new E-Patent Reference feature applicants must: (1) obtain a digital certificate and software from the Office; (2) obtain a customer number from the Office; and (3) properly associate patent applications with the customer number. Alternatively, copies of all U.S. patents and patent application publications can be accessed without a digital certificate from the USPTO web site, from the USPTO Office of Public Records, and from commercial sources. The Office will continue the practice of supplying paper copies of foreign patent documents and nonpatent literature with Office actions. Paper copies of cited references will continue to be provided by the USPTO for international applications during the international stage.

# **Schedule**

June 2004 July 2004 August 2004 TCs 1600, 1700, 2800 and 2900 TCs 3600 and 3700

TCs 2100 and 2600

All U.S. patents and U.S. patent application publications are available on the USPTO web site. However, a simple system for downloading the cited U.S. patents and patent application publications has been established for applicants, called the E-Patent Reference system. As E-Patent Reference and Private PAIR require participating applicants to have a customer number, retrieval software and a digital certificate, all applicants are strongly encouraged to contact the Patent Electronic Business Center to acquire these items. To be ready to use this system by June 1, 2004, contact the Patent EBC as soon as possible by phone at 866-217-9197 (toll-free), 703-305-3028 or 703-308-6845 or electronically via the Internet at ebc@uspto.gov.

# **Other Options**

The E-Patent Reference funct—a requires the applicant to use the secure Private PAIR system, which establishes confidential communications with the applicant. Applicants using this facility must receive a digital certificate, as described above. Other options for obtaining patents which do not require the digital certificate include the USPTO's free Patents on the Web program (http://www.uspto.gov/patft/index.html). The USPTO's Office of Public Records also supplies copies of patents for a fee (http://ebizl.uspto.gov/oems25p/index.html). Commercial sources also provide U.S. patents and patent application publications.

For complete instructions see the Official Gizzette Notice | SPEO TO PROVIDE FLECTRONIC ACCESS TO CITED US. PATENT REFERENCES. WITH OFFICE ACHONS AND A FASE SUPPLYING PAPER COPIES on the ESPTO web site.

# NOTICE OF OFFICE PLAN TO CEASE SUPPLYING COPIES OF CITED U.S. PATENT REFERENCES WITH OFFICE ACTIONS, AND PILOT TO EVALUATE THE ALTERNATIVE OF PROVIDING ELECTRONIC ACCESS TO SUCH U.S. PATENT REFERENCES

#### **Summary**

The United States Patent and Trademark Office (Office or USPTO) plans in the near future to (1) cease mailing copies of U.S. patents and U.S. patent application publications (US patent references) with Office actions except for citations made during the international stage of an international application under the Patent Cooperation Treaty and those made during reexamination proceedings; and (2) provide electronic access to, with convenient downloading capability of, the US patent references cited in an Office action via the Office's private Patent Application Information Retrieval (PAIR) system which has a new feature called "E-Patent Reference." Before ceasing to provide copies of U.S. patent references with Office actions, the Office shall test the feasibility of the E-Patent Reference feature by conducting a two-month pilot project starting with Office actions mailed after December 1, 2003. The Office shall evaluate the pilot project and publish the results in a notice which will be posted on the Office's web site (www.USPTO.gov) and in the Patent Official Gazette (O.G.). In order to use the new E-Patent Reference feature during the pilot period, or when the Office ceases to send copies of U.S. patent references with Office actions, the applicant must: (1) obtain a digital certificate from the Office; (2) obtain a customer number from the Office, and (3) properly associate applications with the customer number. The pilot project does not involve or affect the current Office practice of supplying paper copies of foreign patent documents and non-patent literature with Office actions. Paper copies of references will continue to be provided by the USPTO for searches and written opinions prepared by the USPTO for international applications during the international stage and for reexamination proceedings.

# Description of Pilot Project to Provide Electronic Access to Cited U.S. Patent References

On December 1, 2003, the Office will make available a new feature, E-Patent Reference, in the Office's private PAIR system, to allow more convenient downloading of U.S. patents and U.S. patent application publications. The new feature will allow an authorized user of private PAIR to download some or all of the U.S. patents and U.S. patent application publications cited by an examiner on form PTO-892 in Office actions, as well as U.S. patents and U.S. patent application publications submitted by applicants on form PTO/SB08 (1449) as part of an IDS. The retrieval of some or all of the documents may be performed in one downloading step with the documents encoded as Adobe Portable Document format (.pdf) files, which is an improvement over the current page-by-page retrieval capability from other USPTO systems

Steps to Use the New E-Patent Reference Feature During the Pilot Project and Thereafter

Access to private PAIR is required to utilize E-Patent Reference. If you don't already have access to private PAIR, the Office urges practitioners, and applicants not represented by a practitioner, to take advantage of the transition period to obtain a no-cost USPTO Public Key Infrastructure (PKI) digital certificate, obtain a USPTO customer number, associate all of their pending and new application filings with their customer number, install no-cost software (supplied by the Office) required to access private PAIR and E-Patent Reference feature, and make appropriate arrangements for Internet access. The full instructions for obtaining a PKI digital certificate are available at the Office's Electronic Business Center (EBC) web page at: <a href="http://www.uspto.gov/ebc/downloads.html">http://www.uspto.gov/ebc/downloads.html</a>. Note that a notarized signature will be required to obtain a digital certificate.

To get a Customer Number, download and complete the Customer Number Request form, PTO-SB125, at: <a href="http://www.uspto.gov/web/forms/sb0125.pdf">http://www.uspto.gov/web/forms/sb0125.pdf</a>. The completed form can then be transmitted by facsimile to the Electronic Business Center at (703) 308-2840, or mailed to the address on the form. If you are a registered attorney or patent agent, then your registration number must be associated with your customer number. This is accomplished by adding your registration number to the Customer Number Request form. A description of associating a customer number with an application is described at the EBC web page at: <a href="http://www.uspto.gov/ebc/registration-pair.html">http://www.uspto.gov/ebc/registration-pair.html</a>.

The E-Patent Reference feature will be accessed using a new button on the private PAIK screen. Ordinarily all of the cited U.S. patent and U.S. patent application publication references will be available over the Internet using the Office's new E-Patent Reference feature. The size of the references to be downloaded will be displayed by E-Patent Reference so the download time can be estimated. Applicants and registered practitioners can select to download all of the references or any combination of cited references. Selected references will be downloaded as complete documents as Adobe Portable Document Format (.pdf) files. For a limited period of time, the USPTO will include a copy of this notice with Office actions to encourage applicants to use this new feature and, if needed, to take the steps outlined above in order to be able to utilize this new feature during the pilot and thereafter.

During the two-month pilot, the Office will evaluate the stability and capacity of the E-Patent Reference feature to reliably provide electronic access to cited U.S. patent and U.S. patent application publication references. While copies of U.S. patent and U.S. patent application publication references cited by examiners will continue to be mailed with Office actions during the pilot project, applicants are encouraged to use the private PAIR and the E-Patent Reference feature to electronically access and download cited U.S. patent and U.S. patent application publication references so the Office will be able to objectively evaluate its performance. The public is encouraged to submit comments to the Office on the usability and performance of the E-Patent Reference feature during the pilot. Further, during the pilot period registered practitioners, and applicants not represented by a practitioner, are encouraged to experiment with the feature, develop a proficiency in using the feature, and establish new internal processes for using the new access to the cited U.S. patents and U.S. patent application publications to prepare for the anticipated cessation of the current Office practice of supplying copies of such cited

references. The Office plans to continue to provide access to the E-Patent Reference feature during its evaluation of the pilot.

#### Comments

Comments concerning the E-Patent Reference feature should be in writing and directed to the Electronic Business Center (EBC) at the USPTO by electronic mail at <a href="mailto:eReference@uspto.gov">eReference@uspto.gov</a> or by facsimile to (703) 308-2840. Comments will be posted and made available for public inspection. To ensure that comments are considered in the evaluation of the pilot project, comments should be submitted in writing by January 15, 2004.

Comments with respect to specific applications should be sent to the Technology Centers' customer service centers. Comments concerning digital certificates, customer numbers, and associating customer numbers with applications should be sent to the Electronic Business Center (EBC) at the USPTO by facsimile at (703) 308-2840 or by e-mail at EBC@uspto.gov.

## Implémentation after Pilot

After the pilot, its evaluation, and publication of a subsequent notice as indicated above, the Office expects to implement its plan to cease mailing paper copies of U.S. patent references cited during examination of non provisional applications on or after February 2, 2004; although copies of cited foreign patent documents, as well as non-patent literature, will still be mailed to the applicant until such time as substantially all applications have been scanned into IFW.

#### For Further Information Contact

Technical information on the operation of the IFW system can be found on the USPTO website at http://www.uspto.gov/web/patents/ifw/index.html. Comments concerning the E-Patent Reference feature and questions concerning the operation of the PAIR system should be directed to the EBC at the USPTO at (866) 217-9197. The EBC may also be contacted by facsimile at (703) 308-2840 or by e-mail at EBC@uspto.gov.

Date 12 1/03

Michaley P. Hodici Nicholas P. Godici

Commissioner for Patents

COMMISSIONER FOR PATENTS U. S., DEPARTMENT C. COMVERGE

PO. BOX 1450

ALEXANDRIA, VA 223:13-11450
IF UNDELIVERABLE RETURN IN TEN DAYS

OFFICIAL BUSINESS



